

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended): A system for assisting the regeneration of depollution means ~~(1)~~ associated with oxidation catalyst-forming means ~~(2)~~ implementing an OSC function, constituting a supply of oxygen and integrated in an exhaust line ~~(3)~~ of a motor vehicle diesel engine ~~(4)~~, in which the engine is associated with common rail means ~~(7)~~ for feeding its cylinders with fuel, the system ~~being characterized in that it comprises~~ comprising means ~~(8)~~ for analyzing the running conditions ~~(9)~~ of the vehicle and for comparing them with predetermined threshold values ~~(10)~~, to control the engine in a first regeneration mode of operation with a lean mixture ~~(11)~~ when running conditions are above the threshold values, or in a second regeneration operating mode implementing sequences in which engine operation alternates between stages of rich mixture operation and of lean mixture operation ~~(12)~~ when conditions are below the threshold values.

2. (Currently amended): A system according to claim 1, ~~characterized in that~~ wherein the depollution means comprise a particle filter ~~(1)~~.

3. (Currently amended): A system according to claim 2, ~~characterized in that~~ wherein the particle filter includes a catalyst.

4. (Currently amended): A system according to ~~any preceding claim, characterized in that~~ 1, wherein the depollution means comprise a NOx trap.

5. (Currently amended): A system according to ~~any preceding claim, characterized in that~~ 1, wherein the fuel includes an additive that is to be deposited together with the particles with which it is mixed on the depollution means in order to facilitate regeneration

thereof.

6. (Currently amended): A system according to ~~any preceding claim, characterized in that~~ 1, wherein the depollution means ~~(4)~~ are impregnated with an SCR formulation, performing a function of oxidizing CO/HC.

7. (Currently amended): A system according to ~~any preceding claim, characterized in that~~ 1, wherein the engine ~~(4)~~ is associated with a turbocharger ~~(5, 6)~~.

8. (Currently amended): A system according to ~~any preceding claim, characterized in that~~ 1, wherein the running conditions are determined from:

- the load on the engine;
- its running speed;
- the speed of the vehicle; and/or
- the temperature level in the vehicle exhaust line.